Statement of Basis of the Federal Operating Permit

Lion Elastomers LLC

Site Name: Port Neches Plant
Physical Location: 1615 Main St
Nearest City: Port Neches
County: Jefferson

Permit Number: O1224
Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 325212
NAICS Name: Synthetic Rubber Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: August 7, 2018

Operating Permit
Basis of Determination

Permit Area Process Description
The Lion Elastomers Port Neches SBR facility receives butadiene by pipeline. Styrene and butadiene are combined in one of five different reactor areas containing a total of 76 different reactors (73 continuous and 3 batch) to produce latex. Unreacted butadiene and styrene are then recovered and recycled in one of two different recovery units. The butadiene and styrene are stored with trace levels of an inhibitor to prevent polymerization before they are mixed in the reactor section. Styrene is received via barge at the TPC Group, LLC dock on the Neches River. The capability also exists to receive tank trucks of styrene.

The term pigment in SBR manufacture refers to the miscellaneous chemicals necessary to mix with the monomers to produce SBR. SBR ingredients other than butadiene and styrene, or pigments, include:

- Soap - an emulsifier to hold the monomer and polymer in an emulsion form and to control the rate of polymerization;
- Modifiers - typically mercaptan compounds added to control polymer molecular chain length and to help prevent formation of cross-linked polymers;
- Oxygen Scavenger - typically sodium hydrosulfite, added to the soap solution, if necessary, to react with any oxygen present, and inhibit the polymerization reaction;
- Activator Solution - typically sodium formaldehyde sulfoxylate is added to the reactor charge at a controlled rated to yield the desired reaction time;
- Oxidizing Agent - fed directly to the first reactor to initiate the oxidation-reduction reaction that generates free-radicals necessary for polymerization;
- Shortstops - typically added to the latex in order to terminate polymerization after a desired conversion rate has been attained.

The resulting latex stock is finished in one of 10 finishing lines, first by coagulation, after which it is washed and dewatered. The rubber is then broken into small pieces (referred to as crumb rubber), and dried prior to packaging. The combination of reactors and finishing lines is capable of producing numerous polymer types with an annual production capability of approximately 580 million pounds.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO

Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas

Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit’s Applicable Requirement Summary. This is consistent with EPA’s White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources

that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO_2 Trading Program)	No

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to

which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
AIRCOMP	30 TAC Chapter 117, Subchapter B	R7101	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and before the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
AIRCOMP	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Crankcase = The stationary CI RICE is equipped with a closed crankcase ventilation system. HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Performance Test = No previous performance test used, a performance test is conducted to demonstrate initial compliance Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Control Technique = Oxidation catalyst Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Emission Limitation = Reducing carbon monoxide emissions from the stationary RICE Displacement = The stationary CI RICE has a displacement less than 30 liters per cylinder and uses diesel fuel. Monitoring System = Monitoring system other than a CPMS or CEMS Service Type = Normal use. Stationary RICE Type = Compression ignition engine
FWPUMP	30 TAC Chapter 117, Subchapter B	R7101	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and before the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
FWPUMP	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
GRP-NGX2	30 TAC Chapter 117, Subchapter B	Primary	Horsepower Rating = HP is less than 300 NOx Emission Limitation = Title 30 TAC §§ 117.105(a)(1), (a)(3), (d), or (e) CO Emission Limitation = Title 30 TAC §§ 117.105(c)(1) 30 TAC Chapter 116 Emission Limit = NOx emission limit in 30 TAC §§ 117.105 or 117.305 is greater than the NOx emission limit in a 30 TAC Chapter 116 permit.

Unit ID	Regulation	Index Number	Basis of Determination*
			NH3 Emission Limitation = Title 30 TAC §§ 117.105(c)(2) NOx Reduction = None
SERVPUMP	30 TAC Chapter 117, Subchapter B	R7101	Horsepower Rating = HP is less than 300
SERVPUMP	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP less than 100 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Service Type = Normal use. Stationary RICE Type = Compression ignition engine
UTILGEN2	30 TAC Chapter 117, Subchapter B	R7101	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
UTILGEN2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
39-0013	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
39-0013	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0014	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
39-0014	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0015	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
39-0015	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0016	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
39-0016	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0048	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = Other than crude oil, condensate, or VOC True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
39-0167	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is less than or equal to 1,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
39-0167	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0189	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
39-0189	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0190	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
39-0190	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0195	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
39-0195	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
39-0210	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is less than or equal to 1,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
40-0049	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = Other than crude oil, condensate, or VOC True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
40-0193	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
40-0193	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
40-0234	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
40-0234	40 CFR Part 60, Subpart Kb	Primary	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
40-0234	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
40-0235	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
40-0235	40 CFR Part 63,	Primary	Vessel Type = Storage vessel or tank.

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart U		Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
F-RFBASIN	40 CFR Part 63, Subpart U	63U	Process Wastewater = The tank receives, manages, or treats process wastewater streams (as defined in 40 CFR Part 63, Subpart F or from the routine washing or rinsing of batch equipment between batches). Vessel Type = Storage vessel or tank. Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482. Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151 m^3 and vapor pressure of liquid stored is less than 5.2 kPa.
F-SKIM	40 CFR Part 63, Subpart U	63U	Process Wastewater = The tank receives, manages, or treats process wastewater streams (as defined in 40 CFR Part 63, Subpart F or from the routine washing or rinsing of batch equipment between batches). Vessel Type = Storage vessel or tank. Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482. Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151 m^3 and vapor pressure of liquid stored is less than 5.2 kPa.
GRPHI1-2	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
GRPHI1-2	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
GRPLOWCAP1	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is less than or equal to 1,000 gallons
GRPLOWCAP1	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-MACTU	40 CFR Part 63, Subpart U	63U	Process Wastewater = The tank receives, manages, or treats process wastewater streams (as defined in 40 CFR Part 63, Subpart F or from the routine washing or rinsing of batch equipment between batches). Vessel Type = Storage vessel or tank. Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482. Wastewater Tank Properties = Volume of the wastewater tank is less than 75 m^3 and storing liquid with any vapor pressure.
GRPMID1-2	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
GRPMID1-2	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
GRPMID3-2	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
GRPMID3-2	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
GRPMIDCAP1	40 CFR Part 63, Subpart U	Primary	Vessel Type = Storage vessel or tank. Group 1 Vessel = The unit is a Group 2 vessel as defined in 40 CFR § 63.482.
GRPMIDCAP3	30 TAC Chapter 115, Storage of VOCs	Primary	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = Other than crude oil, condensate, or VOC True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
BOILER 2	30 TAC Chapter 117, Subchapter B	R7201-2	NOx Emission Limitation = Title 30 TAC § 117.110(a)(1).

Unit ID	Regulation	Index Number	Basis of Determination*
			Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. CO Emission Limitation = Title 30 TAC § 117.110(c)(1). Functionally Identical Replacement = Unit is not a functionally identical replacement. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on rolling 12-month average.
BOILER 2	40 CFR Part 60, Subpart Db	60Db	Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. Heat Input Capacity = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
BOILER 2	40 CFR Part 60, Subpart Dc	60Dc-1	Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). Technology Type = None. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.
BOILER 3	30 TAC Chapter 117, Subchapter B	R7201-2	NOx Emission Limitation = Title 30 TAC § 117.110(a)(1). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. CO Emission Limitation = Title 30 TAC § 117.110(c)(1). Functionally Identical Replacement = Unit is not a functionally identical replacement. Fuel Type #1 = Natural gas. Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on rolling 12-month average.
BOILER 3	40 CFR Part 60,	60Db	Construction/Modification Date = After June 19, 1984, and on or before June 19, 1986.

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart Db		Heat Input Capacity = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
BOILER 3	40 CFR Part 60, Subpart Dc	60Dc-2	Construction/Modification Date = On or before June 9, 1989. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). Technology Type = None. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF.
BOILER 5	30 TAC Chapter 117, Subchapter B	R7201-1	NOx Emission Limitation = Title 30 TAC § 117.110(a)(1). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 100 MMBtu/hr but less than 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. CO Emission Limitation = Title 30 TAC § 117.110(c)(1). Functionally Identical Replacement = Unit is not a functionally identical replacement. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.
BOILER 5	40 CFR Part 60, Subpart Db	60Db-1	Construction/Modification Date = On or before June 19, 1984. D-Series Fuel Type #1 = Natural gas. Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW). Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. ACF Option - SO2 = Other ACF or no ACF. Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. ACF Option - PM = Other ACF or no ACF. ACF Option - NOx = Other ACF or no ACF.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-BOILER	30 TAC Chapter 117, Subchapter B	R7201-2	NOx Emission Limitation = Title 30 TAC § 117.110(a)(1). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. CO Emission Limitation = Title 30 TAC § 117.110(c)(1). Functionally Identical Replacement = Unit is not a functionally identical replacement. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on rolling 12-month average.
GRP-BOILER	40 CFR Part 60, Subpart Db	60Db	Construction/Modification Date = On or before June 19, 1984. Heat Input Capacity = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
GRP-BOILER	40 CFR Part 60, Subpart Dc	60Dc-2	Construction/Modification Date = On or before June 9, 1989. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). Technology Type = None. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF.
DOCKFLARE	30 TAC Chapter 111, Visible Emissions	Primary	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
DOCKFLARE	40 CFR Part 60, Subpart A	Primary	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
PLANTFLARE	30 TAC Chapter 111, Visible Emissions	Primary	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
PLANTFLARE	40 CFR Part 60, Subpart A	Primary	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).

Unit ID	Regulation	Index Number	Basis of Determination*
			Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
GRP-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
GRP-FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device. ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
GRP-DRYER	30 TAC Chapter 111, Visible Emissions	R1111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. SIP Violation = The source is able to comply with applicable PM and opacity regulations without the use of PM collection equipment and has not been found to be in violation of any visible emission standard in a State Implementation Plan. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
GRP-DRYER	30 TAC Chapter 115, Vent Gas Controls	Primary	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-PROCVENTS	30 TAC Chapter 111, Visible Emissions	R1111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. SIP Violation = The source is able to comply with applicable PM and opacity regulations without the use of PM collection equipment and has not been found to be in violation of any visible emission standard in a State Implementation Plan. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
S-8CCVENT1	30 TAC Chapter 115, Vent Gas Controls	Primary	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.
S-8CCVENT1	40 CFR Part 63, Subpart U	Primary	Halogenated = Vent stream is not halogenated. Organic Monitoring Device = Installing a control device as required by 40 CFR § 63.489(b)(5)-(b)(7) Vent Stream Type = Batch front-end process vent Alternate Monitoring Parameters = Alternate monitoring parameters were not requested or were not approved. Stream Group Status = Stream is routed to a flare or control device complying with the control requirements or 40 CFR § 63.487(a) or (b) for batch or aggregate batch vent streams. Control Device = Flare Emission Episodes = The control device is operated at all times when batch emission episodes are venting. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = The by-pass line valve is sealed with a carseal or lock-and-key device. Performance Test = Conducting a performance test to demonstrate compliance

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VENTC	30 TAC Chapter 115, Vent Gas Controls	Primary	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
S-7CDVENT	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
S-7CDVENT	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
S-7CDVENT	40 CFR Part 63, Subpart U	Primary	Performance Test = A prior performance test was not conducted using the same methods specified in 40 CFR § 63.116. Vent Stream Type = Continuous front-end process vent Alternate Monitoring Parameters = Alternate monitoring parameters have not been requested or approved. Routed to Recovery = The combined front-end process vent stream is not routed to a recovery device prior to any other control or venting to

Unit ID	Regulation	Index Number	Basis of Determination*
			the atmosphere. Stream Group Status = Vent stream meets the definition of Group 1 continuous front-end process vent. Alternate Continuous Monitoring Requested = An alternate continuous monitoring system has not been requested or has not been approved. HAP Concentration = HAP concentration is at least 50 ppm. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. By-pass Lines = The vent system does not contain by-pass lines. Control Device = Flare Halogenated = Vent stream is not halogenated.
EPPU 1	40 CFR Part 63, Subpart U	63U-ALL	Research and Development = The elastomer product process unit (EPPU) is used for production. Primary Product = An elastomer is the primary product of the process unit. Flexible Unit = The EPPU is not a flexible unit as defined in 40 CFR § 63.482. No Orgainic HAP = The EPPU manufactures a product that uses or produces an organic HAP. Existing Source = The source is an existing source.
GRP-UDRYERS	40 CFR Part 63, Subpart U	63U	Control Device = No control device is used. Rubber Type and Production Process = Styrene butadiene rubber produced by the emulsion process. § 63.494(a)(5) Products = The EPPU produces only an elastomer product with a residual organic HAP limitation under § 63.494. Back-end Process Continuous = The back-end process is continuous. Crumb Dryer = The crumb dryer does not vent to a control device and the carbon disulfied concentration is maintained at or below 45 ppmv in the exhaust by operational means. Performance Test = Engineering assessment is used to demonstrate compliance with the carbon disulfide requirements. Alternate Monitoring Parameters = Monitoring parameters other than those required by § 63.497(a)(1)-(6) have not been approved or have not been requested. Existing Source = The source is an existing source. Stripping Technology = Compliance with the emission limitation in § 63.694(a) is achieved using stripping technology. Alternate Monitoring System = No alternate continuous monitoring system is requested. Back-end Processes = The EPPU includes back-end processes as defined in 40 CFR § 63.482. Periodic Sampling = Compliance is demonstrated using periodic sampling. Bypass Lines = The vent system does not contain a by-pass line. Continuous Stripping = The stripper is used in continuous mode.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Registrations submitted by permittees are also available online through the link provided below. The following table specifies the permits by rule that apply to the site.

The status of air permits, applications, and Permits by Rule (PBR) registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 4132A	Issuance Date: 08/15/2013
Authorization No.: 74010	Issuance Date: 03/24/2015
Authorization No.: 9908	Issuance Date: 06/15/2010
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 03/14/1997
Number: 106.512	Version No./Date: 06/13/2001

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: GRP-DRYER	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible Emissions	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRP-PROCVENTS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible Emissions	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on April 11, 2018.
   Site rating: 12.44 / Satisfactory Company rating: 12.44 / Satisfactory
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating?.....No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes

OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes